

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 53768 - L2 Version 2
Chandra X-Ray Center

L2 Processing Date : Apr 22 2013

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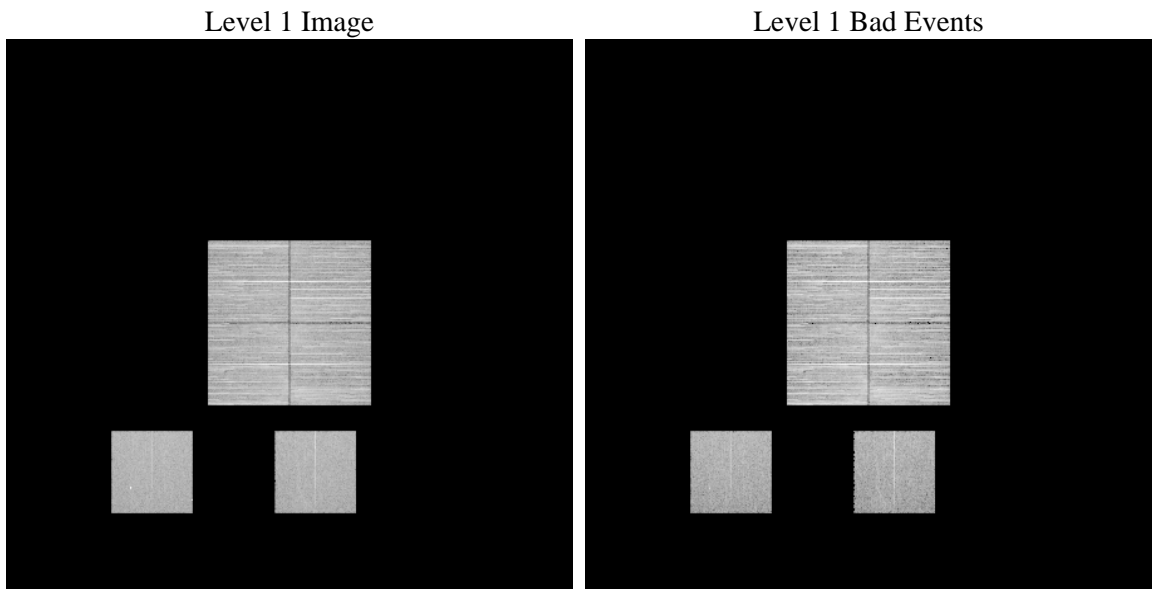
1 Front

seq_num	 	Sequence number
obs_id	53768	Observation id
title	ACIS-012357 diagnostics	Proposal title
observer	CHANDRA engineering request/realtime commanding	Principal investig
object	 	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	0.0	Observer's specified target RA [deg]
dec_targ	0.0	Observer's specified target Dec [deg]
ra_nom	193.50108206008	Nominal RA [deg]
dec_nom	4.6787110075939	Nominal Dec [deg]
roll_nom	215.86903470699	Nominal Roll [deg]
revision	2	Processing version of data
ontime	8227.1551341414	Sum of GTIs [s]
livetime	8122.9779420349	Livetime [s]
ontime0	8227.1140941381	Sum of GTIs [s]
ontime1	8227.0730541348	Sum of GTIs [s]
ontime2	8227.0320141315	Sum of GTIs [s]
ontime3	8227.1961741447	Sum of GTIs [s]
ontime5	8226.9909741282	Sum of GTIs [s]
ontime7	8227.1551341414	Sum of GTIs [s]
l2events	240437	Number of level 2 events

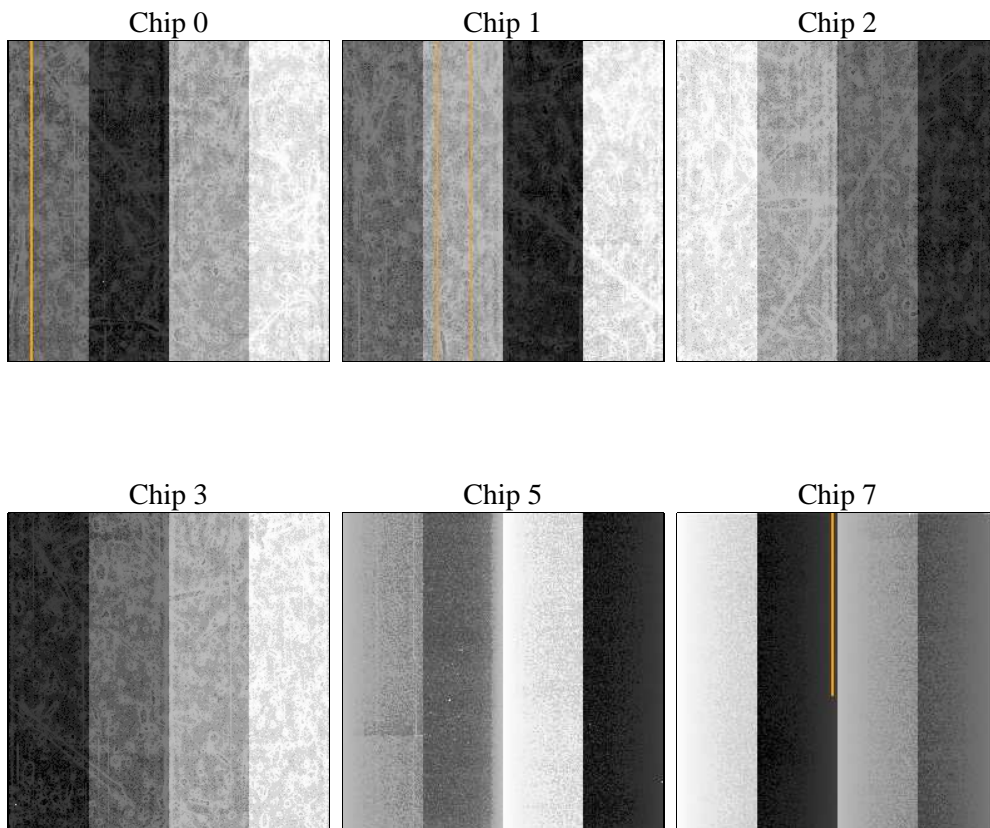
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	0.0	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	8227.1551341414	Sum of GTIs [s]
caldsver	4.5.6	 	ontime0	8227.1140941381	Sum of GTIs [s]
date	2013-04-22T21:35:28	Date and time of file creation	ontime1	8227.0730541348	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	8227.0320141315	Sum of GTIs [s]
			ontime3	8227.1961741447	Sum of GTIs [s]
			ontime5	8226.9909741282	Sum of GTIs [s]
			ontime7	8227.1551341414	Sum of GTIs [s]
			l1events	914620	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 5	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 5	ccd 7
level 1 events	156509	161649	171030	160042	134960	130430	grade 0 events	16811	15968	17365	17383	5857	8550
rejected events	123402	128855	137657	126862	73753	71112		10%	9%	10%	10%	4%	6%
rejected %	78%	79%	80%	79%	54%	54%	grade 1 events	86	79	90	116	138	129
								0%	0%	0%	0%	0%	0%
							grade 2 events	6837	7237	6604	6346	23074	14771
								4%	4%	3%	3%	17%	11%
							grade 3 events	2256	2084	2315	2293	2051	4743
								1%	1%	1%	1%	1%	3%
							grade 4 events	2179	2192	2256	2340	1974	4728
								1%	1%	1%	1%	1%	3%
							grade 5 events	2749	2830	2682	3164	5870	7684
								1%	1%	1%	1%	4%	5%
							grade 6 events	5253	5596	5086	5053	28666	26958
								3%	3%	2%	3%	21%	20%
							grade 7 events	120338	125663	134632	123347	67330	62867
								76%	77%	78%	77%	49%	48%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012357	ACIS-012357	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	OVERRIDE	OVERRIDE
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	SECONDARY	SECONDARY	On-chip summing requested	N	N
[deg] Pointing RA	0	193.5010820600806	Subarray requested	NONE	NONE
[deg] Pointing Dec	0	4.678711007593929	Alternating exposures requested	N	N
[deg] Pointing Roll	0.0	215.8690347069851	[s] Primary exposure time	3.2	3.2
SIM focus pos (mm)	-1.4281808131	-1.4281808131			
[mm] SIM defocus	0.1051557500557434	0.1051557500557434			
SIM translation stage pos (mm)	250.4635187649	250.4635187649			
[mm] SIM translation stage offset	-0.007542945905271381	-0.007542945905271381			
[s] Observation start time (MET)	482560125.374504	482560125.374504			
Observation start date	2013-04-17T04:28:45	2013-04-17T04:28:45			
[s] Observation end time (MET)	482571963.137975	482571963.137975			
Observation end date	2013-04-17T07:46:03	2013-04-17T07:46:03			
Read mode	TIMED	TIMED			

2.3 Star Slots

2.4 FID Slots

A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2013.04.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.2271551341414

A.2 Comments

A spatial region of the original bias map for CCD = 2 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~ 20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD = 2 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation. The pixels affected by the anomaly are bounded by chip coords:
(121,1),(187,1),(187,1024),(121,1024)